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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

ZAMANI, ALI A

ART UNIT

PAPER NUMBER

2674

DATE MAILED: 10/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

PR4

Office Action Summary

Application No.

09/212,292

Applicant(s)

JUN, SUNG-GON

Examiner

Ali A. Zamani

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2 is/are allowed.
- 6) ☒ Claim(s) 1 and 3-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ozolins (US Pat. No. 5,990,858).
3. In regard to claims 1 and 9-10, Ozolins discloses a flat panel display apparatus for receiving display information including video data (40), a receiver (20) receives input signals originating from the graphic controller and output signals to analog LCD panel (30), a PLL (90), a brightness controller (100) a micro processor (80), an output terminal for externally transferring synchronizing signal and analog video signal to an analog display (see Fig. 1). Ozolins also teaches that since standard desktop computers produce analog RGB signals for cable connections instead of digital video signals, digital LCDs need additional analog to digital converter (ADCs) to intrupt the video signals from the desktop computers (col. 1, lines 50-60). Ozolins further teaches analog LCDs that are capable of utilizing analog RGB signals have been introduced to the market recently, although such analog LCDs do not require ADCs (see col. 1, lines 63-67 and col. 2, lines 1-6). Thus it would have been obvious to one of ordinary skill in the art at the time of

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invention do not use any ADC in order to an interface that allows analog LCDs to simulate the operations of multifrequency CRT monitors having capabilities to adjust to various display protocols.

Claim Rejections - 35 USC § 103

4. Claim 3-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ozolins in view of Rokunohe et al. (US Pat. No. 4,549,175).

In regard to claim 3-8, Ozolins is discussed above. Ozolins substantially shows the above claimed limitations except for a “deflection signal generator”. However, Rockunohe disclose an image transmission apparatus includes a synchronizing signal generator (17), for generating horizontal and vertical synchronizing signal when raster scanning is made on a CRT (20), an deflection signal generator (62), a luminescent signal generator (63), a video amplifier (64). Rockunohe is cited to show the concept of using a deflection signal generator (62) for receiving synchronizing signal output from synchronizing signal generator (17) via output terminal and for generating deflection signal is old. Thus, it would have been obvious to one of ordinary skill in the art to utilize the signal deflection of Rockunohe in the display device of Ozolins to provide a flat panel display with means for connecting to an analog display, which make a convenient presentation to many people.

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Allowable Subject Matter

5. Claim 2 is allowable over prior art of record.

6. The following is an examiner's statement of reasons for allowance: the prior art does not teach:

“ A flat panel display apparatus for receiving display information including video data synchronizing data from a host processing digital data in a serial digital communication, said display apparatus adapted for operation without need for any analog-to-digital converter (ADC) or phase-locked loop (PLL) circuit for signal conversion, said display apparatus comprising: a receiver for reconstructing said display information; a synchronizing signal generator for generating a synchronizing signal by extracting the synchronizing data from said reconstructed display information; a digital-to-analog converter for converting said video data to a corresponding analog video signal ; an output terminal for externally transferring said synchronizing signal and analog video to an analog display apparatus; and a video data converter for converting line and dot numbers of said video data converter for converting line and dot numbers of said video data so as to correspond to a prescribed display mode when said synchronizing data has a different characteristic from said prescribed display mode.

Response to Arguments

7. Applicant's arguments filed 07-05-02 with respect to claims 1 and 3-10 have been fully considered but they are not persuasive.

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A. On page 4, Applicant argue that claim 1, contains the following limitations: "said display apparatus adapted for operation without need for any analog-to-digital converter (ADC) or phase-locked loop (PLL) circuit for signal conversion.". and on page 5, applicant argue that Ozolins would still not make the subject matter of claim 1 obvious. However Examiner disagrees, because Ozolins teaches the limitations of claim 1 (see col. 1, lines 63-67) and (see Fig. 1, col 2, lines 60-67 and col. 3, lines 1-47). Therefore, the last office action maintained.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ali Zamani whose telephone number is (703) 308-6414. The examiner can normally be reached on Monday through Friday from 8:00 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard A. Hjerepe, can be reached on (703) 305-4709.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, DC 20231

or faxed to:


(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Ali Zamani

September 30, 2002


RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600